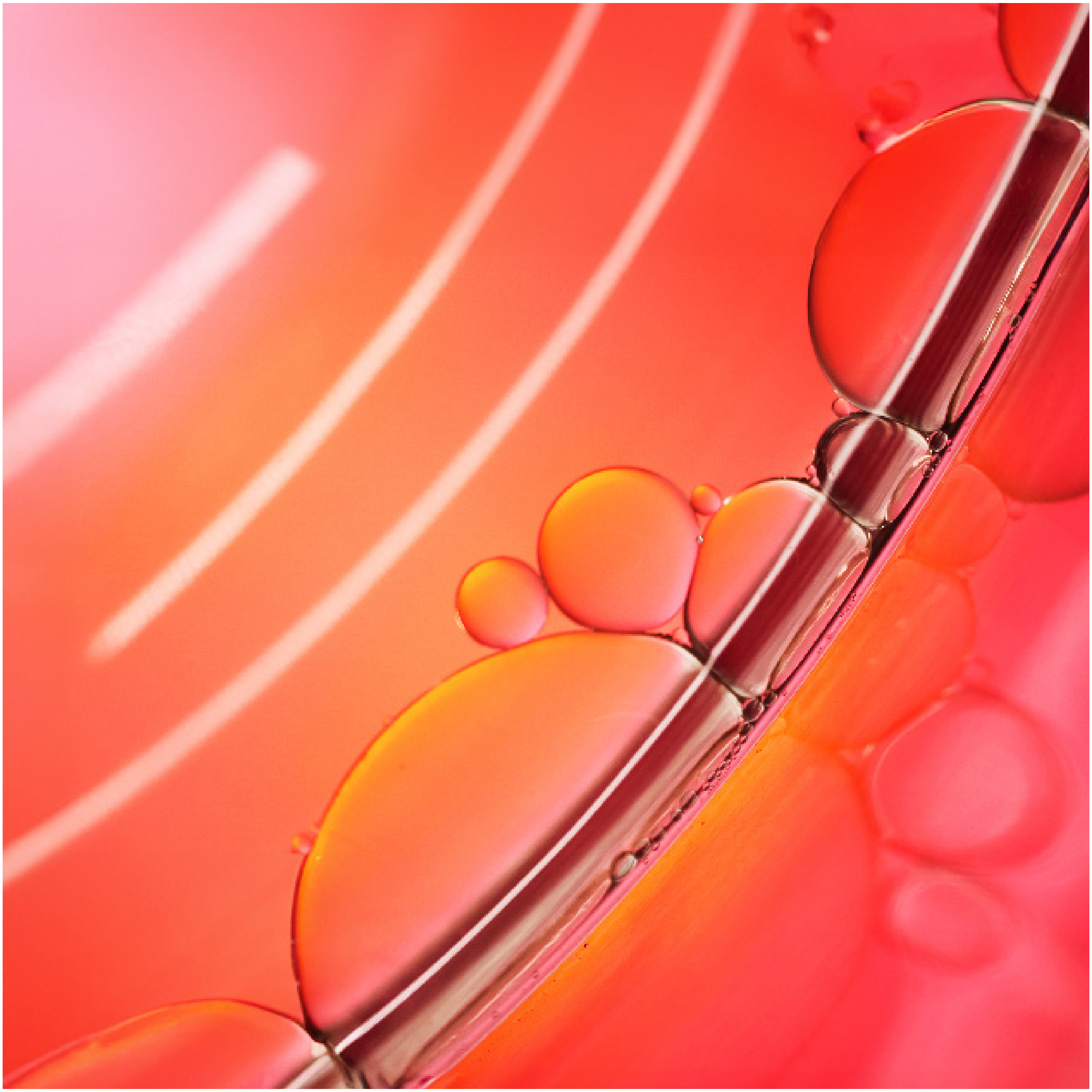


Global Healthcare Private Equity Report 2024

BAIN & COMPANY

Contents

Healthcare Private Equity Market 2023: Year in Review and Outlook

Macroeconomic challenges have exacted a toll on healthcare buyouts, but green shoots in deal activity reflect the industry's strong fundamentals.

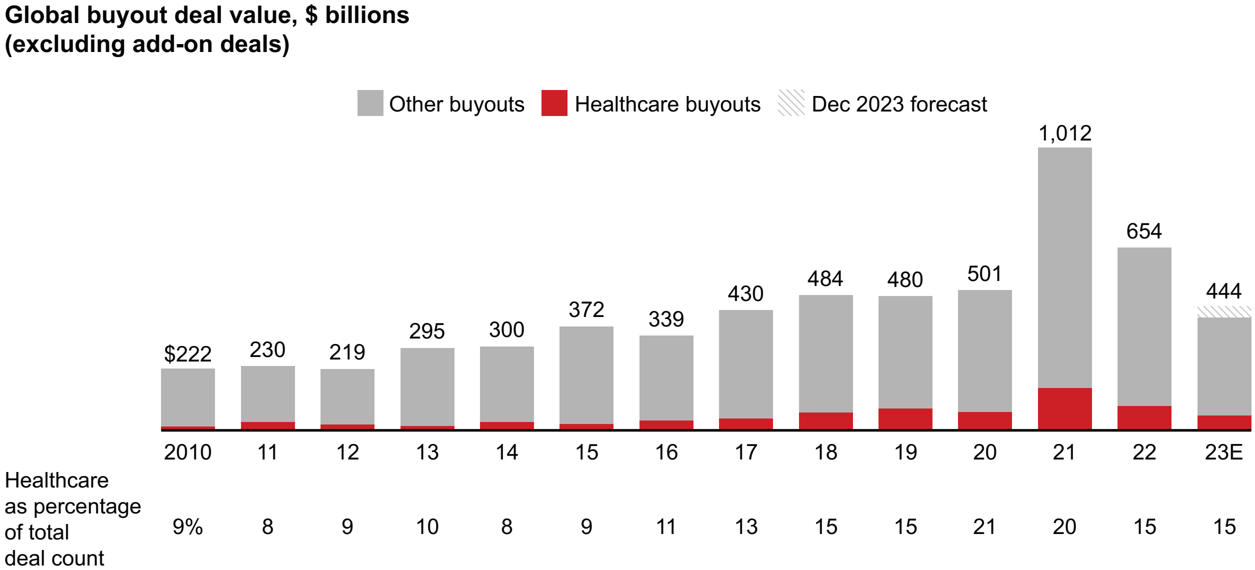
By Nirad Jain, Kara Murphy, Dmitry Podpolny, Franz-Robert Klingan, Vikram Kapur, and Alex Boulton

At a Glance

- Investors continue trying to unlock liquidity and raise capital for healthcare deals, in a challenging fund-raising environment.
- Biopharma deals represent the biggest share of healthcare buyouts, while new modalities and innovative therapies such as GLP-1s transform the investment landscape.
- As investors look to diversify their Asia-Pacific buyout activity, India is viewed as a place to deploy healthcare capital at scale.
- Private equity investors continue to pursue healthcare IT deals, with rising competition from tech specialists and corporate investors.

The healthcare sector continued to be a hub of private equity (PE) deal activity in 2023, relative to all PE deals across the world, despite higher global interest rates, inflationary pressures, and broader geopolitical uncertainty (*see Figure 1*).

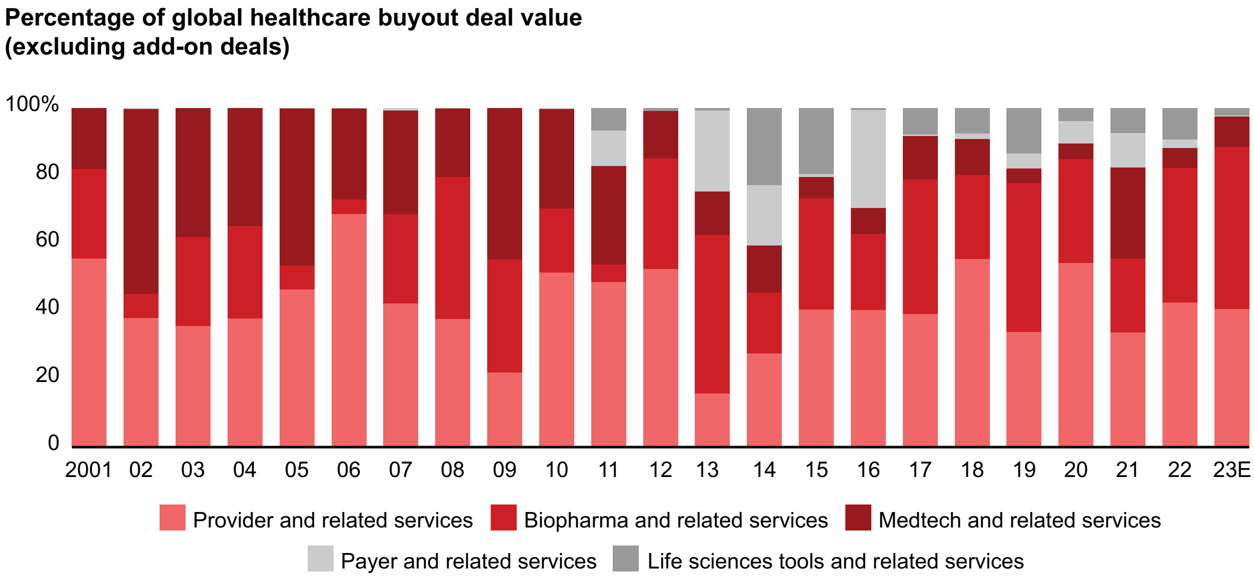
Figure 1: Healthcare held its own in a tepid overall deal market



Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

Across all regions, a number of common themes emerged. To start, biopharma deals along with transactions involving related services, such as contract research organizations (CROs) and contract development and manufacturing organizations (CDMOs), made up the largest share of global deal value at 48% (see *Figure 2*). Meanwhile, in the healthcare information technology (HCIT) space, deals for electronic medical and health record providers underscored the importance of next-generation IT in healthcare. We also tracked the continued rise of glucagon-like peptide-1 agonists (GLP-1s), which will have implications across the sector, including supporting continued growth in the sterile fill finish market, where the leader, Baxter BioPharma Solutions (now Simtra), was acquired by Warburg Pincus and Advent International.

Figure 2: Biopharma composed the largest share of healthcare deals



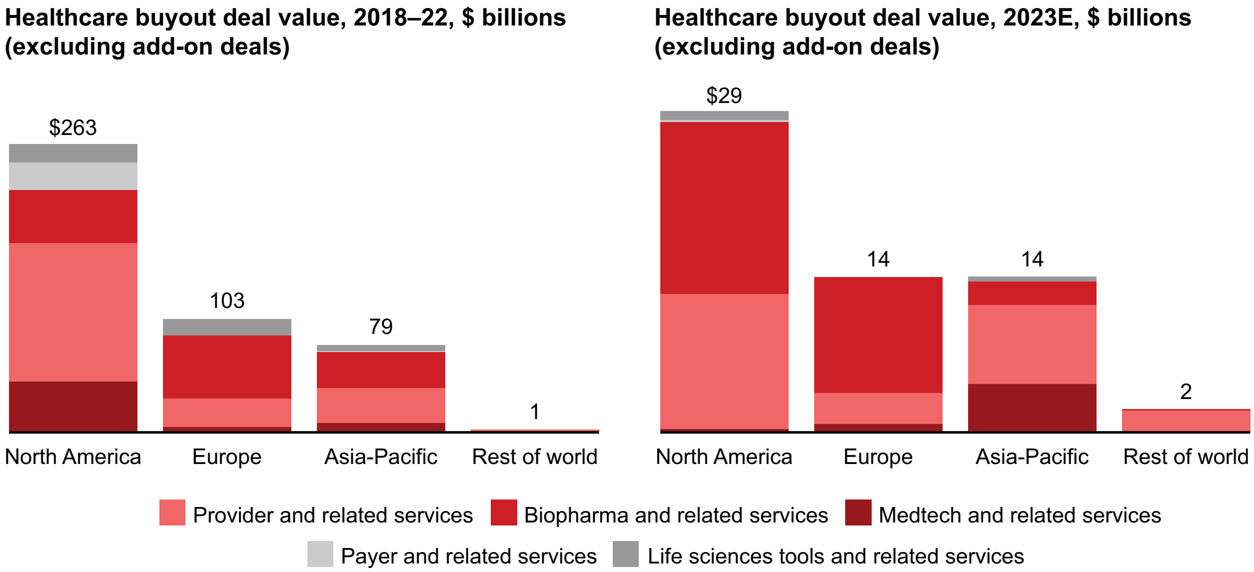
Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023; 2010 value includes $1 billion of uncategorized deals
Sources: Dealogic; AVCJ; Bain analysis

The year saw six deals in excess of $2 billion—the largest being the taking private of Syneos Health by Elliott Investment Management, Patient Square Capital, and Veritas Capital—compared with 13 in 2022 and 14 in 2021, though with some large deals in flux. There have also been around 375 deals below the $2 billion mark, a testament to high levels of activity at the middle and small levels.

Within North America, announced deal values came in around $29 billion, with biopharma accounting for 25% of deal activity and 54% of deal value (*see Figure 3*). Activity in provider businesses (historically a large share of US deals) slowed as those businesses experienced inflationary and labor market pressures. Nonetheless, a number of provider deals closed across specialties such as oncology, orthopedics, and cardiology with the opportunity to drive ancillary expansions relatively insulated from broader healthcare and macroeconomic pressures. Case in point: TPG and Cencora's (formerly known as AmerisourceBergen) acquisition of OneOncology from General Atlantic for $2.1 billion.

In Europe, announced deal value fell approximately 44% year over year from $25 billion in 2022 to $14 billion in 2023. Excluding EQT/Luxinva's acquisition of Dechra Pharmaceuticals, the announced deal value would have declined by about 70%. Constrained credit markets and continued disruption from labor and cost inflation dampened activity in the retail health and provider sectors. Europe also saw several announced processes that did not result in a transaction, as buyers and sellers failed to align on valuations.

Figure 3: North America still hosts the highest value of healthcare deals



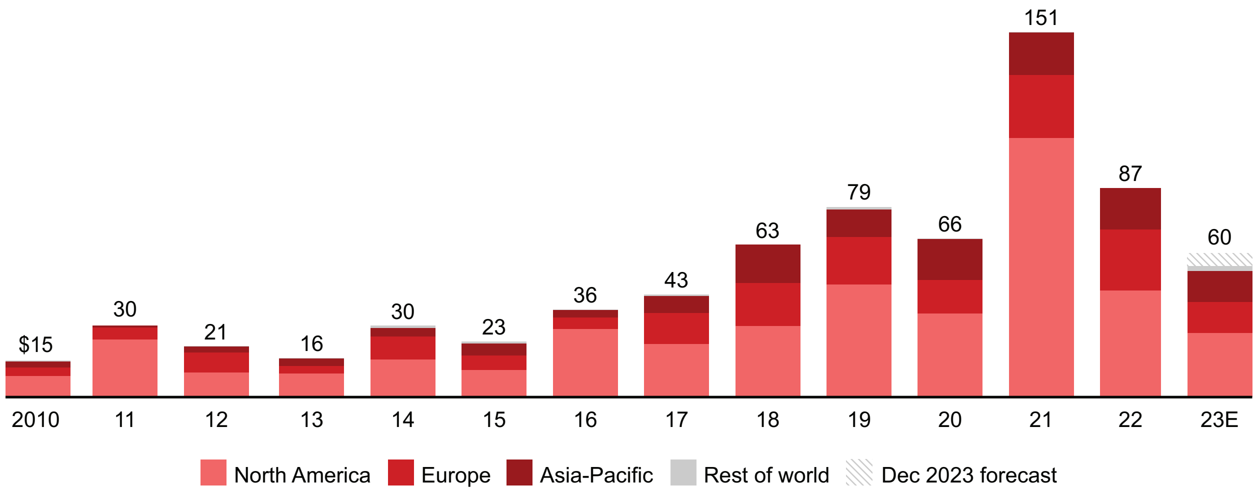
Notes: Excludes spin-offs, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

Diversification of investments in the Asia-Pacific region

In the Asia-Pacific region, deal activity was slightly lower than 2018–22 levels, with announced deal value at around $14 billion (*see Figure 4*). China remains very relevant for investment, while India represented the largest share of announced deal value. That said, investors seeking to manage geopolitical risk began to broaden their horizons to other Asia-Pacific countries. India, in particular, has seen a long-term rise in biopharma-related activity (for example, in generics and active pharmaceutical ingredient manufacturing), albeit with a slowdown year over year, while also seeing growth in domestic demand driven by an expanding middle class and government insurance programs (*see Figure 5*). These macroeconomic dynamics, coupled with a number of successful exits from early investors in India—such as TPG's sale of a controlling stake in Care Hospitals to Blackstone—have propelled private equity sponsors to regard India as a place to deploy healthcare capital at scale.

Figure 4: Deal activity has proved to be more resilient in Asia-Pacific relative to other regions

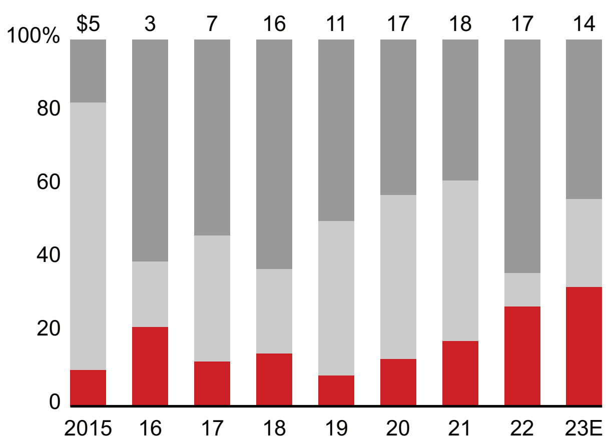
Global healthcare buyout disclosed deal value, $ billions (excluding add-on deals)



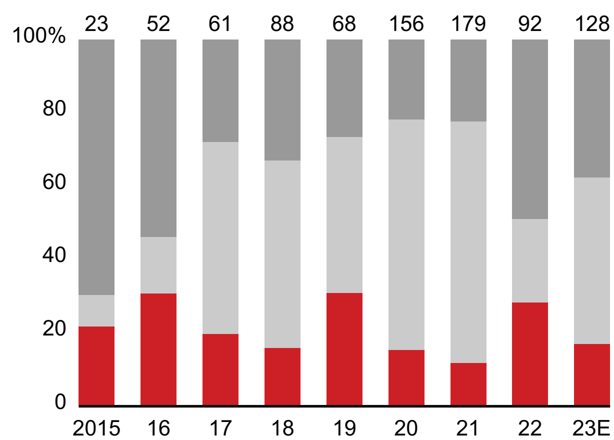
Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

Figure 5: India has taken an increasingly important role in Asia-Pacific's healthcare market

Healthcare buyout deal value, $ billions (excluding add-on deals)



Healthcare buyout deal count (excluding add-on deals)



India China Rest of Asia

Notes: Excludes spin-offs, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

Responses to liquidity challenges: value creation and secondary transactions

Sponsors faced a challenging fund-raising environment in 2023, at a time when overall exit volume was decreasing and competition for fresh capital was increasing. In line with the overall PE markets, sponsor exits in healthcare declined in 2023, setting up PE funds for a conflict in 2024 between prolonging holding periods and the desire among limited partners for liquidity.

Fund sponsors have been strategizing about how to offset the impact on the internal rate of return from longer holding periods via two mechanisms: first, by investing in incremental value-creation opportunities, with an emphasis on commercial excellence, pricing, and margin expansion, and second, by exploring alternative avenues for liquidity, both for the funds and their limited partners. The latter approach has triggered a rise in the exploration of secondary transactions (partial/early exits) including continuation vehicles.

In 2023, many buyout funds initiated secondary-dedicated funds; notably, Blackstone raised $24.9 billion, $2.7 billion of which is earmarked to its inaugural GP-led continuation fund strategy. In addition, Ardian, Lexington Partners, and Goldman Sachs collectively fund-raised more than $50 billion for their secondary vehicles. Several factors make these instruments attractive: secondaries provide GPs an early, often partial exit opportunity, allowing them to secure liquidity to finance growth ambitions or return capital to investors, and boosting a fund's distributions to paid-in capital.

Continuation funds, another form of secondary transaction, buy time until the market appropriately prices a holding's potential. Moreover, bid-ask spreads for secondary market continuation funds, where the seller is often a partial buyer, tend to be narrower than the bid-ask spreads in primary markets.

PE firms have also sought to navigate the current environment by joining with other firms to tackle larger targets, in addition to seeking partnerships with and capital from sovereign wealth funds (as in the acquisition of Dechra Pharmaceuticals). PE firms are not immune to broader fund-raising challenges: Preqin estimates that in 2023 there has been $3.3 trillion of global private capital targeted by funds, but only $1 trillion raised. Large funds are capturing a greater share of allocations, benefiting from strong fund strategies, commercial motions, differentiated pitches, and sector-specialized investment teams.

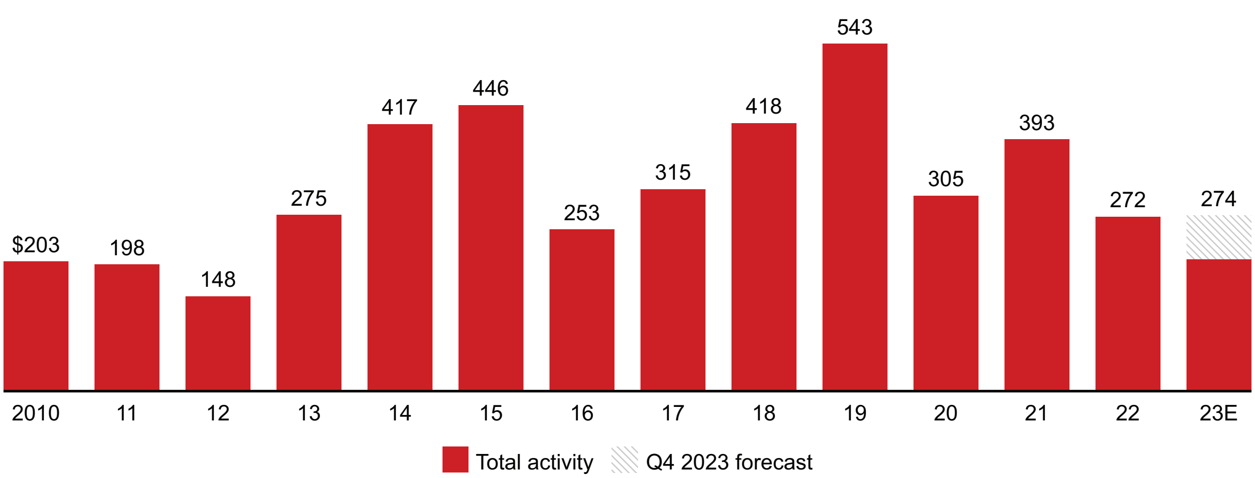
Corporate M&A: Strategics' access to lower-cost capital enabled sustained biopharma deal activity

Healthcare corporate M&A value was up from 2022, bucking headwinds on biopharma from the Inflation Reduction Act (IRA) in the US. Pfizer announced its acquisition of Seagen for just under $45 billion in the largest acquisition in biopharma since Abbvie's acquisition of Allergan for $63 billion in 2019. Strategics, especially large-cap biopharmas, have retained access to lower-cost capital, which has fueled higher levels of activity compared with buyout funds. This level of activity occurred despite intensified scrutiny from the Federal Trade Commission (FTC), as seen in suits over Amgen's acquisition of Horizon, a deal announced in 2022 and closed recently.

In reaction to heightened FTC scrutiny, strategics appear to be prioritizing more modest acquisitions that advance specific strategic goals and are less likely to arouse antitrust scrutiny—for example, Merck's acquisition of Prometheus Biosciences (*see Figure 6*). That said, corporate healthcare M&A has seen 19 deals in excess of $2 billion in the first three quarters of 2023.

Figure 6: The value of deals by strategic buyers edged up in 2023, as strategics' access to financing allowed them to do deals large enough to move the needle

Global healthcare and life sciences strategic deal value, $ billions



Notes: Q4 2023 deal value is a straight-line extrapolation using Q1–Q3 data; strategic M&A includes corporate M&A deals (which include PE exits) and add-ons, excludes special purpose acquisition companies/blank check companies defined by deal technique (SPAC acquisition), excludes venture capital/corporate venture capital defined by deal technique (funding round) or acquirer business description (venture capital), excludes other strategic PE buyers' deals classified as strategic but having the acquirer's specific industry group as defined by Dealogic: finance-acquisitions/restructurings, finance-capital pool companies, or finance-government sponsored entities/credit agencies
Source: Dealogic

Macroeconomic headwinds buffet healthcare

Healthcare PE has outperformed other sectors across multiple market cycles and recessionary periods; however, the reasons for this resilience have varied from cycle to cycle. Over the past decade, deal returns were driven by revenue growth and multiple expansion—the latter a byproduct of low interest rates and abundant credit. By contrast, the current inflationary climate has taken a heavy toll on labor-intensive businesses, as labor shortages challenge many healthcare sectors.

Still, we see positive momentum generated from innovation triggered by the pandemic, which has led to a range of new healthcare delivery models and modalities (such as remote physiologic and therapeutic monitoring and at-home care), and new life-sciences capabilities (such as CDMOs' supply expansion and Covid vaccine distribution). Segments propelled by this innovation have continued to power deals, while segments with a more challenging cost structure look for ways to improve margin profile. No two cycles are the same, but there are reasons for optimism about the future of healthcare investing.

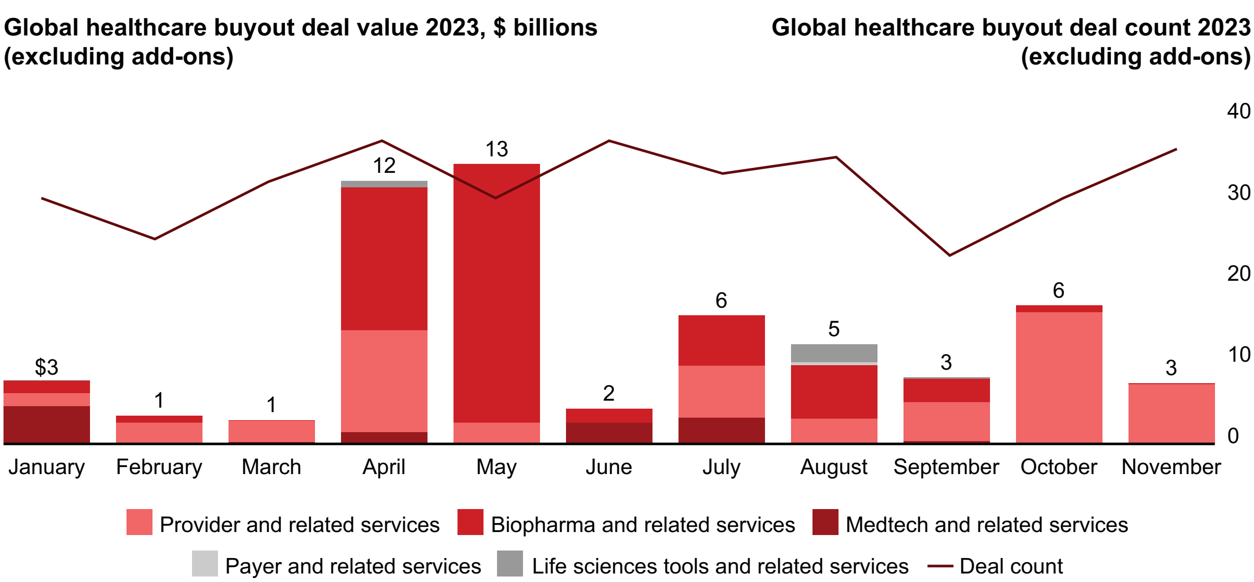
We see positive momentum generated from innovation triggered by the pandemic, which has led to a range of new healthcare delivery models and modalities (such as remote physiologic and therapeutic monitoring and at-home care), and new life-sciences capabilities (such as CDMOs' supply expansion and Covid vaccine distribution).

What to look for in 2024 and beyond

Following a slow start to 2023, growth signals have reemerged in the buyout market (*see Figure 7*). In many geographies, inflation is cooling as the impact of higher interest rates take effect; at the same time, elevated material and labor costs are showing up as higher reimbursements for healthcare goods and services. In credit markets, rates are projected to remain elevated through 2024. As investors adjust to these realities, we expect sponsor-to-sponsor and secondary transactions to increase in 2024. Meanwhile, take-privates, carve-outs, and secondaries will continue to represent an elevated share of deal activity as investors seek to unlock value.

Following a slow start to 2023, growth signals have reemerged in the buyout market.

Figure 7: Healthcare deal value clustered in the middle of 2023



Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

Given an improving macroeconomic backdrop, investors should consider these questions for 2024 and beyond:

- **When will generative AI transform the healthcare sector?** Current pilots of generative AI tools have focused on repetitive or expensive tasks such as documentation. When these tools move to widespread rollouts that touch on the core competencies of organizations, the effects will be significant and widely felt.

- **How will the HCIT landscape shake out?** HCIT remains an important lever for healthcare and life sciences organizations seeking to offset macro headwinds and make better use of data and analytics. In this environment, both providers and biopharma companies are striking a balance between adopting platforms vs. best-of-breed solutions. Within HCIT, Epic continued its expansion in several offerings, such as its payer platform. The competition for assets is intensifying, with traditionally nonhealthcare investors entering the space, underscoring the need for strong playbooks in HCIT.

- **How will life sciences innovation continue to affect investing?** During the past few years, we saw strong growth in new modalities such as mRNA and therapeutic classes such as GLP-1s. While the direct implications of growth are clear, there are significant downstream effects of increased GLP-1 agonist uptake within pharma, healthcare, and beyond.

- **How will India's role in Asia-Pacific play out?** Investments in and strategies focused on Asia-Pacific are evolving, and India's favorable macro tailwinds have made it a leading destination for capital. India has traditionally seen investments in biopharma and providers, and it is still too soon to know whether green shoots in other areas such as health insurance technology firms achieve comparable prominence, and whether these firms can parlay their success in India to expand across Asia-Pacific.

- **How can financial sponsors effectively respond to liquidity pressures from their investors?** Sponsor-led secondary transactions, especially continuation funds, have increased dramatically in the past decade. However, the record amount of capital raised for secondaries is likely to increase competition in this space as well.

Given the mountain of capital waiting on the sidelines, competition for in-market deals is expected to remain strong. Internal rates of return historically have been driven by revenue and multiple expansion, which will be more challenging to achieve. PE sponsors will need to establish higher confidence in value creation opportunities earlier, such that they can commit greater capital. It is critical for sponsors to think beyond pure commercial diligence and evaluate a wider set of operational, technological, and other factors such as environmental, social, and governance considerations early in their process to create value quickly. Only a clear fund strategy paired with strong investment screening, integrated diligence, focused teams, and post-acquisition value creation plans will set the most successful investors apart in the year ahead.

Generative AI Will Transform Healthcare

A once-in-a-generation technology surges into a centuries-old industry.

By Eric Berger, Nirad Jain, Kara Murphy, Dmitry Podpolny, Franz-Robert Klingan, Vikram Kapur, and Alex Boulton

At a Glance

- Generative AI promises to drive significant productivity gains, improve patient and provider experience, and ultimately lead to better clinical outcomes.
- The technology could lower administrative costs, speed biomedical research and drug development, improve claims management, and help develop next-generation diagnostic equipment.
- Big technology companies are partnering with healthcare organizations to apply generative AI, and investors are deploying capital in nascent companies built around the tool.
- Investors need to consider generative AI's disruptive potential on portfolio companies and new investments, and identify opportunities to take advantage of the technology.

Foundation models, large language models (LLMs), and generative artificial intelligence (AI) captured the attention of providers, biopharmas, payers, and investors over the past year, driven by the promise of making healthcare delivery more efficient, innovative, and effective (*see Figure 1*). While traditional, analytical AI has been used in healthcare for many years, generative AI is distinguished by its ability to create new content, summarize and translate existing content, and, ultimately, to "reason and plan."

The technology has potential across many use cases, including these:

- For providers and in care delivery, it promises to cut the time spent on documenting patient visits and reimbursement-related communications, which would reduce clinician burnout and lower administrative costs. Indeed, organizations such as HCA Healthcare are pursuing these opportunities via partnerships with tech companies such as Google, in part because patients may already be changing their behavior, using off-the-shelf tools to understand and inform their interactions with clinicians.

- In biomedical research and drug development, generative AI is speeding innovation, as evidenced by the strategic alliance between Sanofi and BioMap, where Sanofi will use BioMap's AI platform to optimize the process of drug discovery. Molecular biology-specific LLMs are also supporting predictive modeling of protein structure and target-binding affinity, in addition to the creation of therapeutic candidates themselves.

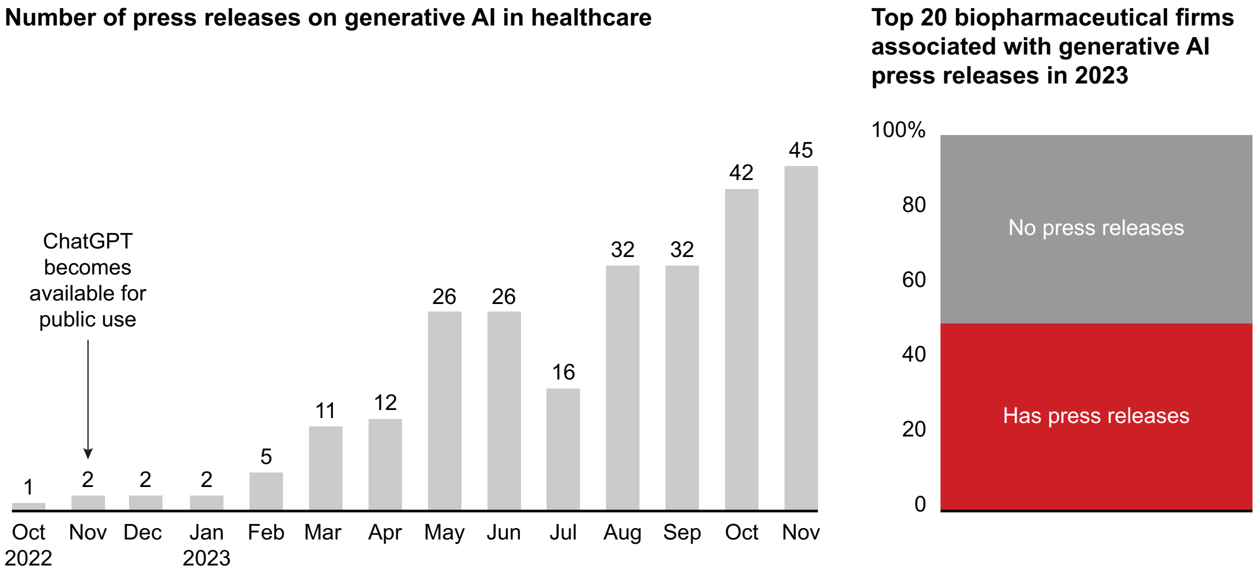
- Insurers and other payers have long made use of AI in data analytics, claims management automation and adjudication, and quality and risk management. Now, they are implementing generative AI for member navigation, an example being UnitedHealth Group's virtual assistant for patient communication.

- Medtech companies, meanwhile, are focusing their investments on next-generation diagnostic equipment to detect diseases via AI-enabled hardware, surgical robots with AI-powered systems, or smart remote-monitoring devices. For example, Philips is partnering with Amazon Web Services to develop generative AI to advance the company's PACS image processing and enhance radiology workflows, as part of its broader AI efforts in diagnosis and treatment, connected care, and personal health.

- As foundation models, computer vision, and other areas continue to mature, all types of healthcare organizations will find opportunities to apply generative AI to support operations across the value chain (such as supply chain management and back-office activities).

Ultimately, generative AI may reshape healthcare institutions' core functional areas, presenting an opportunity for investors to serve changing markets and adjust operations within existing portfolio companies.

Figure 1: News headlines about generative AI in healthcare surged in 2023



Notes: Left-hand side represents results from a Factiva search for press releases with the keywords "Generative AI" or "Gen AI" or "Generative artificial intelligence" or "GenAI," in "Healthcare/Life Sciences" as industry from Oct. 1, 2022, through Nov. 30, 2023, manually scrubbed to remove duplicates and irrelevant results; right-hand side reflects publicly available information from 2023 on generative AI use by the top 20 biopharmas by 2022 revenue, including company events, press releases, and other announcements (e.g., company blog posts)
Sources: Factiva; desktop research; Bain analysis

A nascent stage of investment

Healthcare investment in generative AI has just begun.

Technology companies are collaborating with major healthcare organizations to apply generative AI tools. For instance, Microsoft and Epic have teamed up to reduce the time clinicians spend documenting or replying to patient messages. Google is working with Bayer to automate drafting of clinical trial communications in multiple languages and is partnering with iCad to integrate AI tools in the company's devices to detect breast cancer. IBM is working with Microsoft Azure to analyze complex medical records. Ultimately, healthcare information technology vendors are at the forefront of using generative AI, marrying the technology with their extensive networks of providers and users.

Among investors, venture capital and growth equity funds have been deploying capital in companies built around generative AI as a core competency. For example, Hippocratic AI, a healthcare-focused LLM company, raised $50 million in a seed round co-led by General Catalyst and Andreessen Horowitz. Genesis Therapeutics, a drug discovery platform that uses generative AI to pinpoint novel drug candidates, closed a $200 million series B round, with participation from Andreessen Horowitz, Fidelity, and BlackRock.

Mature private equity (PE)-backed companies are also investing in LLMs to drive operational improvement in various areas including better clinician or patient engagement and lower cost structures. For example, Syneos Health, taken private by Elliott, Patient Square, and Veritas, entered into a multiyear deal with Microsoft to leverage OpenAI's ChatGPT in clinical trials and commercial programs. Similarly, Advent-backed Iodine Software has partnered with OpenAI to infuse LLMs into its AwareCDI product suite to improve the software's accuracy and efficiency.

The effects on portfolio companies and new investments

To get ahead of this rapidly evolving technology, PE investors must carefully consider the impact of generative AI on their portfolio companies. Primarily, they need to assess the exposure of their portfolio companies' markets to generative AI disruption, paying attention to both the magnitude and timing of any potential threats or opportunities. Bain has developed a framework to gauge disruption risk, which assesses labor intensity, level of knowledge required to perform tasks, the type and frequency of interactions with humans, and the value of augmented pattern recognition, among other variables.

Businesses where the following are core elements of the value proposition face greater risk: creative content generation, labor-intensive administrative processes and call center work, and text-writing and summarization. For example, business process outsourcers that employ low-skilled labor to generate communication for medical claims and denials may be places where generative AI can automate or accelerate the processes. On the other hand, in healthcare businesses that rely on expert guidance, such as physicians providing clinical recommendations, the technology poses less of a risk for disruption, but instead may be viewed as an opportunity to democratize access and improve quality.

In deploying generative AI at portfolio companies, investors should develop a focused strategy with three key elements:

- identifying opportunities to leverage commercially available generative AI tools;
- consider building proprietary generative AI software where there is an opportunity to establish competitive differentiation; and
- defining generative AI governance and guardrails to ensure its proper use, such as update policies and data security.

Similarly, investors should consider the implications of generative AI for new investments' deal theses, determining the disruption risk of generative AI and the potential for generative AI to unlock value, as part of due diligence and value-creation planning.

The long-term potential of generative AI

Given the complexity and uniqueness of patient situations, much of the work in healthcare requires human labor and judgment. Even areas where less discretion is needed, such as coding, charting, and registry extracts, have seen limited impact from AI models due to relatively small data sets available to train the algorithms. Generative AI promises to address some of these challenges, and experiments will likely proliferate in the year ahead. These efforts and early use cases have the potential to trigger strong labor efficiency gains—addressing the financial pressures on organizations, improving the patient and provider experience, and leading to better clinical outcomes.

We expect progress over the next year to come in select and focused use cases. Over a longer time frame, the breadth and depth of generative AI's impact on healthcare may well be transformative across workflows, applications, and ways of working. Investors who are thoughtful about generative AI's impact on their existing portfolio companies and new investments will be able to harness this technological change to generate returns and accelerate the transformation of the healthcare sector.

Over a longer time frame, the breadth and depth of generative AI's impact on healthcare may well be transformative across workflows, applications, and ways of working.

Healthcare IT Hits a Speed Bump

Despite the slowdown in dealmaking in 2023, healthcare IT retains its appeal to private equity investors.

By Caitlin Dowling, Nirad Jain, Kara Murphy, Dmitry Podpolny, Franz-Robert Klingan, Vikram Kapur, and Alex Boulton

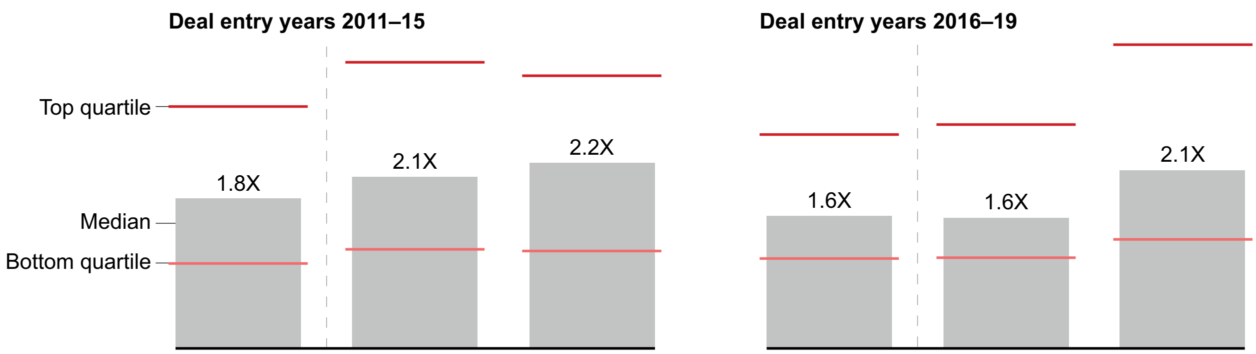
At a Glance

- Despite a drop in deal volume in 2023, healthcare IT attracts investment due to its ability to drive innovation and offset macro factors such as inflation, labor shortages, and reimbursement headwinds.
- Providers use IT to focus on revenue cycle management, clinical workflow optimization, and patient engagement; biopharma on clinical trial digitalization, analytics, and real-world evidence; and payers on member engagement and value-based care.
- Increasingly, organizations must balance software integration, vendor management optimization, tech stack simplification, and interoperability with best-of-breed solutions.
- Artificial intelligence and the move toward platforms are transforming the healthcare IT landscape.

Healthcare information technology (HCIT) sits at the intersection between the steady resilience of the healthcare sector to recession and the high returns of the software and broader IT sector. The result: an attractive upside potential with lower downside risk (see *Figure 1*).

Figure 1: Healthcare IT delivered strong upside returns from 2011 to 2019

Multiple on invested capital for global buyout and growth deals



	All other industries (2011–15)	Healthcare (2011–15)	HCIT (2011–15)	All other industries (2016–19)	Healthcare (2016–19)	HCIT (2016–19)
Deal volume	5,151	704	127	1,824	312	80
Invested equity capital, $ billions	522.6	66.2	8.0	238.2	29.9	12.4

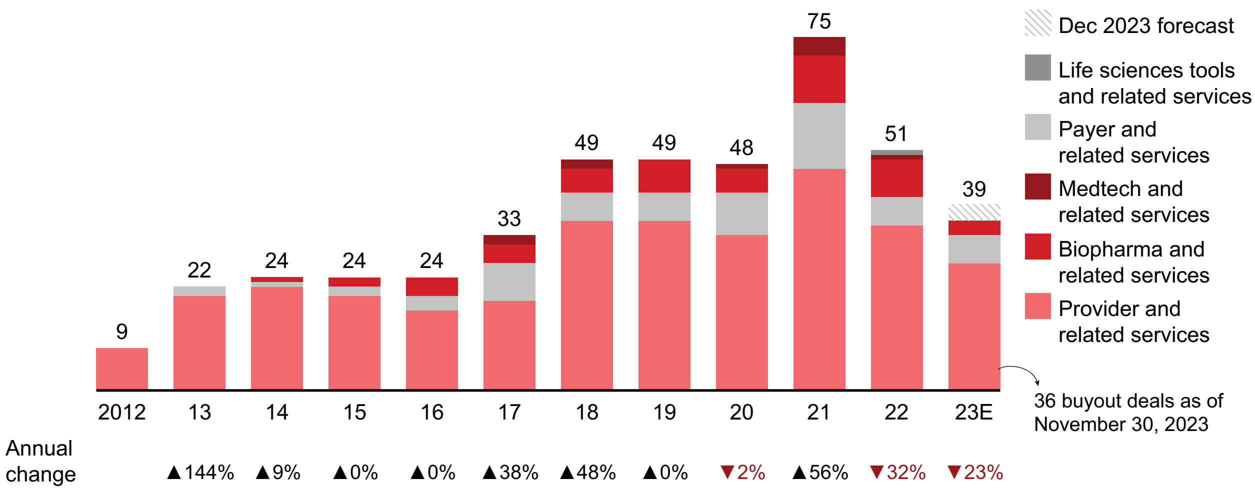
Notes: Deal universe includes only fully and partially realized buyout and growth deals with initial investments in 2011-2015, 2016-2019 globally; all deal sizes. Multiple on invested capital is the ratio of total distributed capital and remaining unrealized value to total investment cost; pooled MOIC is derived by computing the sum of all investments in a given data set and then calculating the MOIC based on the aggregation of cash flows associated to that set of investments (similar to a weighted average, weighted by deal size)
Source: DealEdge.com (data pulled October 2023); use of DealEdge data outside this context requires permission of Bain & Company

In 2023, HCIT buyout activity slowed, with deal volume falling by a projected 23% from 2022, driven mainly by a falloff in provider HCIT transactions (*see Figure 2*). Excitement around digitalization, following the outbreak of Covid-19, resulted in a slew of portfolio companies that are still early in their holding periods. Despite the decline in transactions, HCIT represents 10% of healthcare sector deal volume and has seen some sizable deals, including EngageSmart, Nextech, NextGen, and CorEvitas.

Macroeconomic factors including inflation, labor shortages, and reimbursement headwinds continue to push healthcare operators toward greater automation to raise labor productivity, resulting in investments around workforce management, revenue cycle management (RCM) solutions, drug development workflows, and payer-workflow support. This impetus comes at a time of emerging generative artificial intelligence (AI) models that could unlock process efficiencies and outcome improvements for the industry.

Figure 2: Healthcare IT deal volume has declined dramatically since its 2021 high

Global healthcare IT buyout deal volume (exluding add-on deals)



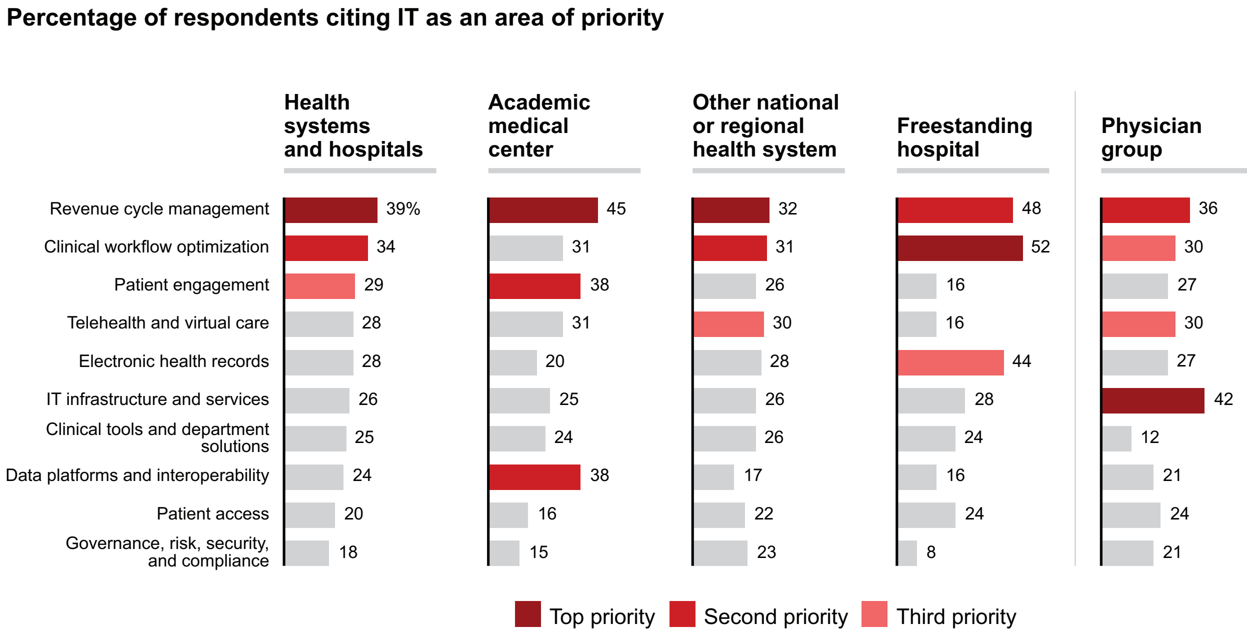
Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

Providers still seeking HCIT to improve their business

Recent Bain-KLAS analysis highlights that IT has become critical to providers as they navigate challenges, accelerating investment in some pockets of the market. RCM, clinical workflow optimization, and patient engagement are top priorities for new investments given that they all deliver measurable return on investment (ROI) (*see Figure 3*).

Macroeconomic factors including inflation, labor shortages, and reimbursement headwinds continue to push healthcare operators toward greater automation to raise labor productivity.

Figure 3: Providers' priorities involve improving their return on investment



Source: Bain-KLAS 2023 Provider Executive Survey (n=201)

Revenue cycle management. RCM creates value by enhancing collections and streamlining labor-intensive processes, thus generating an ROI for providers. No wonder that providers cite RCM as a top priority, anticipating higher spending for software across a broad set of subsegments including revenue integrity, charge capture, and complex claims management. Select activity in 2023—including TA Associates' investment in Alpha II and Alpine's acquisition of Medusind—demonstrated private equity (PE) investors' interest in this space.

Clinical workflow optimization. Providers are leaning on tools that improve workflow efficiency, such as LeanTaaS's expanded offerings with the AI tool iQueue Autopilot, or that enhance remote patient monitoring—as in the case of the merger between LAMF, a special purpose acquisition company, with Nuvo, a digital pregnancy care solution. Solutions that save clinicians time while improving patient outcomes present valuable opportunities.

Patient engagement. Academic medical centers and health systems are focusing on enhancing patient engagement as well as using data platforms to further address value-based care and data monetization. Importantly, the benefits of improved patient engagement extend beyond provider-patient relationships into clinical trial applications, improving retention and compliance and ultimately ensuring respect of trial timeline and better outcomes.

Biopharma and payers taking the next steps on HCIT

The role of HCIT in achieving efficiencies for providers is well known, but HCIT offers multiple benefits to biopharma and payers, too.

Biopharma HCIT continues to focus on the role of clinical trial enablement and digitalization in the wake of regulatory changes. Given rising R&D costs, biopharma companies look for solutions that cut costs. As a result, some large e-clinical platforms could be interesting near-term targets.

In addition to e-clinical platforms, biopharma HCIT has opportunity to capitalize on real-world evidence (RWE) and real-world data (RWD) trends. RWE and RWD have grown more popular in recent years, as pharmaceutical companies become more sophisticated in analyzing data across clinical and commercial use cases. Thermo Fisher's acquisition of CorEvitas and the announcement of CMS to require patient registry enrollment to access Alzheimer's drugs under Medicare coverage are examples of how critical real-world evidence and data will continue to be in the future.

Payers, meanwhile, have aimed their investments at technology that affects member engagement, ranging from performance and quality to value-based care, including enablement such as care coordination and patient engagement/navigation. The merger of HealthComp, a benefits and analytics platform, with Virgin Pulse, a health and wellness company, exemplifies how payers are integrating with patient platforms to drive care outcomes. Other pressing issues include risk adjustment to payment integrity. Payers continue to look for ways to optimize these payment-related functions, which directly affect their bottom line.

Three themes to guide new investments

Investors should keep three themes in mind when evaluating HCIT opportunities.

- **Role of large tech companies and generative AI.** Large, generalist technology companies such as Amazon, Microsoft, and Google are expanding into HCIT, either through core services such as Amazon Web Services and Microsoft's Azure cloud computing platforms, or via AI capabilities such as Microsoft partnering with health systems to use Azure OpenAI. Historically, large tech companies lagged HCIT-focused firms due to lack of customization around healthcare workflows, but some of their recent investments are targeting healthcare. Consequently, more than half of the providers responding in a recent Bain-KLAS survey said they expect to accelerate IT spending with large tech firms, a 12-percentage point increase from the prior year. The exposure level presented by large tech players varies by HCIT subsegment.

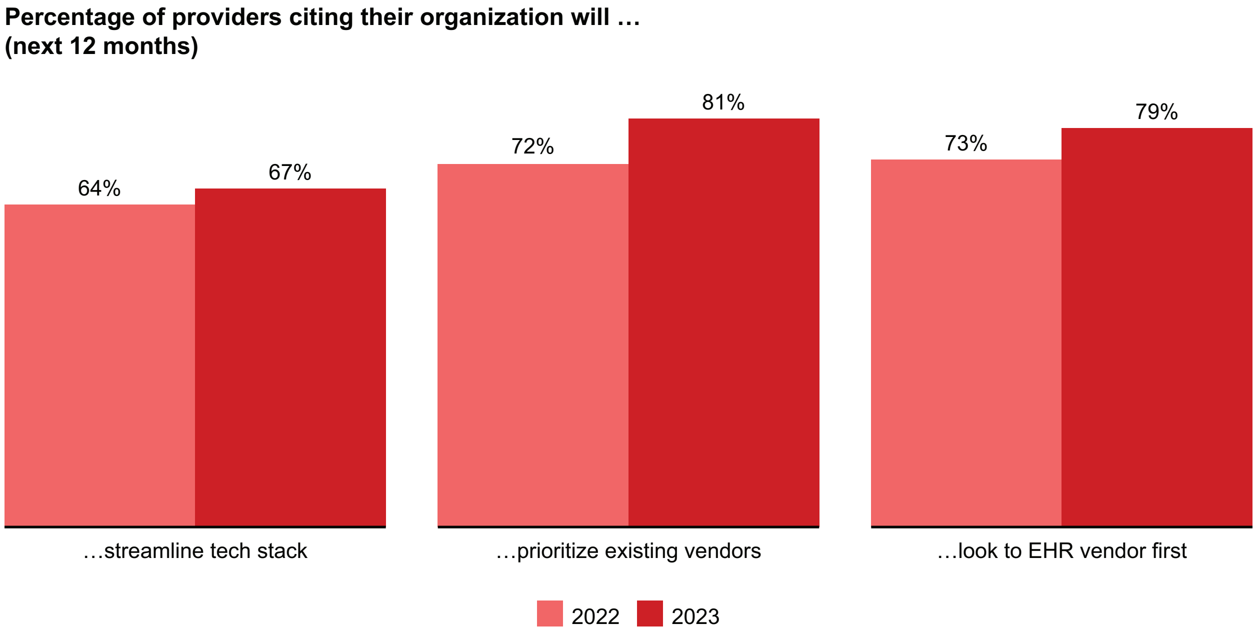
HCIT businesses use generative AI as a tool to develop new products or improve existing ones, although many of the applications remain in a nascent stage. That said, certain trends have emerged. Among providers, for example, generative AI is helping to increase efficiency and improve workflows, particularly when built into RCM solutions. And while just 6% of health systems have a generative AI strategy today, about 50% are developing one or are planning to. In biopharmaceuticals, generative AI is supporting and accelerating drug-development workflows and enhancing commercialization capabilities (see "Generative AI Will Transform Healthcare").

- **Platforms' role in integrating IT solutions.** From provider to biopharma, organizations are looking to maximize software integration, optimize vendor management, simplify their tech stack, and enhance interoperability (*see Figure 4*). Tighter integration remains a key purchasing criterion for companies evaluating IT solutions. Consequently, Epic is taking a greater share of the hospital and health system space (more than 60% of US hospital market share by net patient revenue), given its expanding network effects. Investors should carefully consider Epic's offerings and development roadmap, as Bain-KLAS research shows that most providers prefer native electronic health record (EHR) offerings.

  In the biopharma e-clinical space, many companies are trying to reorganize their tech stack and provide a simpler access point for patients and clinicians. As a result, hub offerings such as Veeva and Medidata that connect multiple stakeholders, digitize, and streamline steps in the clinical trial and patient engagement/communication value chains will continue to play a critical role. Biopharma companies are striking a fine balance between platforms and point solutions, optimizing for the need of interconnectivity and decision-makers' and users' desire to seek best-of-breed tools.

- **Investors' integrated due diligence and post-acquisition playbook.** As the market becomes more competitive and risks evolve, integrated due diligence and post-acquisition playbooks become critical for assessing and underwriting sources of value and winning deals. HCIT due diligences have evolved from pure penetration and attach-rate analysis, toward integrating commercial excellence, pricing, R&D optimization, product functionality assessment, tech-stack fit for purpose, engineering team's ability to innovate, cybersecurity gaps, and other operational and tech levers. Moreover, as HCIT platforms grow and offer less opportunity for bolt-on acquisitions, the role of M&A becomes more nuanced as there will be fewer transactions capable of meaningfully moving the needle.

Figure 4: Providers confront cost and interoperability issues



Source: Bain-KLAS 2023 Provider Executive Survey (n=201)

The competitive landscape for PE firms

Healthcare PE investors face increased competition from specialized, tech-focused PE firms such as Vista Equity Partners, Francisco Partners, and Thoma Bravo that are aggressively pursuing healthcare with their software expertise, as well as increasing interest from strategics such as Thermo Fisher. On the other hand, this increased competition also creates attractive exit pathways for PE investors. Questions remain around which segments of the market may be played out, what the next tech trend is, and how to manage risk: Is specialty HCIT insulated from Epic? What value-based care technologies are scalable? What pharma IT solutions can become platforms?

Given the speed at which HCIT is evolving, and the presence of new competitors, the importance of a clear fund strategy, integrated diligence, and ability to underwrite post-acquisition value creation levers will be ever more important in the near future.

Life Sciences: Navigating Shifts in the Innovation, Regulatory, and Operational Terrains

Private equity funds must be nimble given the effects of new therapies and sweeping Medicare drug negotiation provisions.

By Matt Sullivan, Nirad Jain, Kara Murphy, Dmitry Podpolny, Franz-Robert Klingan, Vikram Kapur, and Alex Boulton

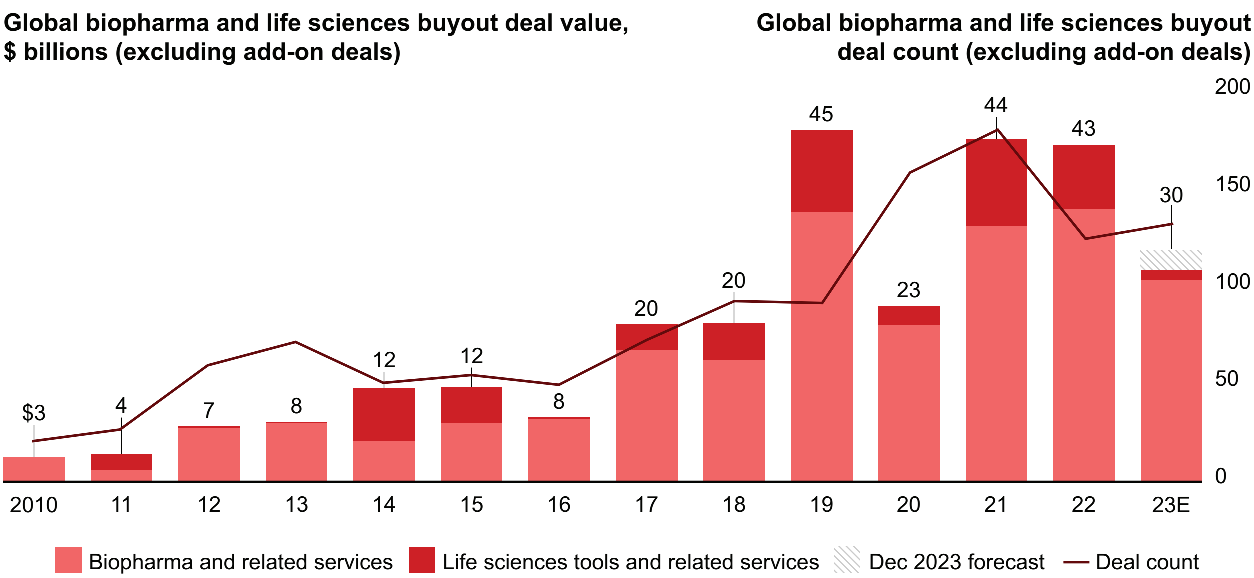
At a Glance

- Although the life sciences sector continues to attract buyout activity, private equity deal value in 2023 struggled to match the levels of 2022.
- While the biotech funding slowdown is still a hurdle, investors began displaying more comfort putting money to work in early-stage therapies and precommercial medical devices.
- The ripple effects of the Inflation Reduction Act's drug negotiation provisions, coupled with greater investment in cell, gene, and RNA therapies, will have broad implications for services providers.
- Demand for glucagon-like peptide-1 agonists (GLP-1s)—such as Wegovy, Ozempic, Mounjaro, and Zepbound—is boosting the need for ingredients or services that support GLP-1 manufacture.

The life sciences sector has assumed a growing importance to private equity (PE) funds as investors look for innovative, recession-resistant businesses. From 2018 through 2022, PE investments into the biopharma, life-sciences tools, and diagnostics sectors surged, with approximately 650 buyout deals consummated globally. Pharma services—including contract research organizations (CROs) and contract development manufacturing organizations (CDMOs)—continued to be an active vertical within life sciences, with deal value above 2022 levels. However, in the face of economic uncertainty and continued high interest rates, overall life sciences deal value in 2023 struggled to maintain last year's pace (*see Figure 1*). That said, continued success will require expertise on the part of funds, including operational and commercial excellence, in addition to scientific proficiency.

Pharma services—including contract research organizations (CROs) and contract development manufacturing organizations (CDMOs)—continued to be an active vertical within life sciences.

Figure 1: Life sciences deal value struggled in 2023 to match the levels of 2022



Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

Four themes shaping life sciences investments

Four key forces are shaping the life sciences investment landscape and innovation:

- the rise of the class of medications known as glucagon-like peptide-1 agonists (GLP-1s);
- the Inflation Reduction Act's (IRA) drug negotiation provisions and its ripple effects;
- increased investment in advanced modalities such as cell, gene, and RNA therapies and the implications for services providers; and
- growing private equity interest in making investments in early-stage therapies and precommercial medical devices.

Coupled with those forces, the rise of artificial intelligence (AI) and its ability to accelerate product development and commercialization will continue to transform life sciences (see "Generative AI Will Transform Healthcare" and "Healthcare IT Hits a Speed Bump").

The promise and potential of GLP-1s

Over the past year, sales in the GLP-1 class of medications surged. Indeed, sales of Novo Nordisk's semaglutide—marketed under the brand names of obesity drug Wegovy and diabetes drug Ozempic—and Eli Lilly's tirzepatide—sold under the brand names of Mounjaro for diabetes and Zepbound for obesity—have been limited only by the ability of manufacturers to produce them. Initially used to treat Type 2 diabetes, the ability of semaglutide and tirzepatide to reduce weight and evidence of their positive effect on cardiovascular and renal health have increased the appetite for GLP-1s among prescribers and patients.

Given the potential market for these drugs, three implications confront PE investors:

- Demand for inputs or services supporting the manufacturing of GLP-1 therapies will likely increase. Firms that supply these goods—such as contract development and manufacturing organizations (CDMOs) focused on peptides and biologics and manufacturers of delivery device components such as autoinjectors—are poised to benefit from the growing demand and current supply constraints.
- An expanded ecosystem to support patients will be needed, including services to identify, qualify, and enroll eligible patients, as well as physical or digital health platforms to support patients on these therapies.
- Finally, investments with business models based on high rates of obesity could see their long-term growth projections decline. Given the novelty of GLP-1s, their ultimate effect for now is unclear. Still, investors should evaluate the implications for returns under a scenario in which obesity rates decrease materially.

Ripple effects of the Inflation Reduction Act have begun

The direct drug price negotiation provisions of the IRA could affect global biopharmaceutical companies profoundly given the outsize contribution of the US market to biopharma revenues and profits. The first round of products subject to negotiation has now been announced, and by early 2024 pharmaceutical companies will have a clearer idea of the negotiated maximum fair prices that go into effect in 2026 to participate in Medicare. PE investments in the biopharmaceutical sector have tended to focus on derivative plays such as services and supporting IT, and the impacts of drug negotiations look to be nuanced for investors.

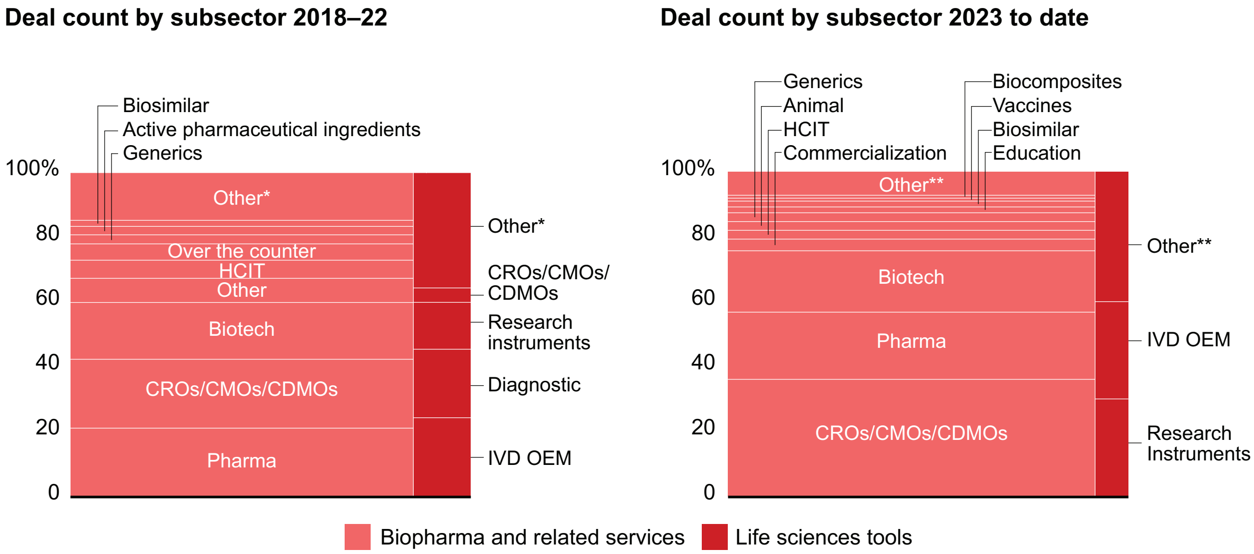
For example, biopharmaceutical companies are expected to focus even more on biological molecules such as antibodies, given the longer period between FDA approval and price negotiation the IRA provides (13 years for biologics vs. 9 years for small molecules). Biopharmaceutical companies will seek to be strategic, conducting multiple drug trials for the same molecule in concert so as to maximize its use and application. For example, a molecule with the opportunity to be used in psoriasis and rheumatoid arthritis may undergo trials on both simultaneously so that in the event that the drug is approved for both conditions, the pharmaceutical company can get the most out of its time window before Medicare negotiations.

Understandably, this is the domain of the biopharmaceutical giants that have the financial and commercial wherewithal to coordinate multiple trials simultaneously and scale up manufacturing quickly. In that case, more biologic assets may change hands during development, from smaller biotech companies to biopharma giants. Indeed, there may be increased appetite among firms of any size to partner with capital providers to support the development of promising molecules.

This effect, in turn, would be expected to flow through into supporting infrastructure, such as contract development and manufacturing organizations (CDMOs) (see *Figure 2*).

The direct drug price negotiation provisions of the IRA could affect global biopharmaceutical companies profoundly given the outsize contribution of the US market to biopharma revenues and profits.

Figure 2: 2023 brought a larger share of deals in CROs, CMOs, and CDMOs than in previous years



Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; IVD OEM is in vitro diagnostics original equipment manufacturers; Other* includes categories with fewer than 10 deals; Other** includes categories with fewer than 2 deals; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

Early innings of growth in advanced modalities

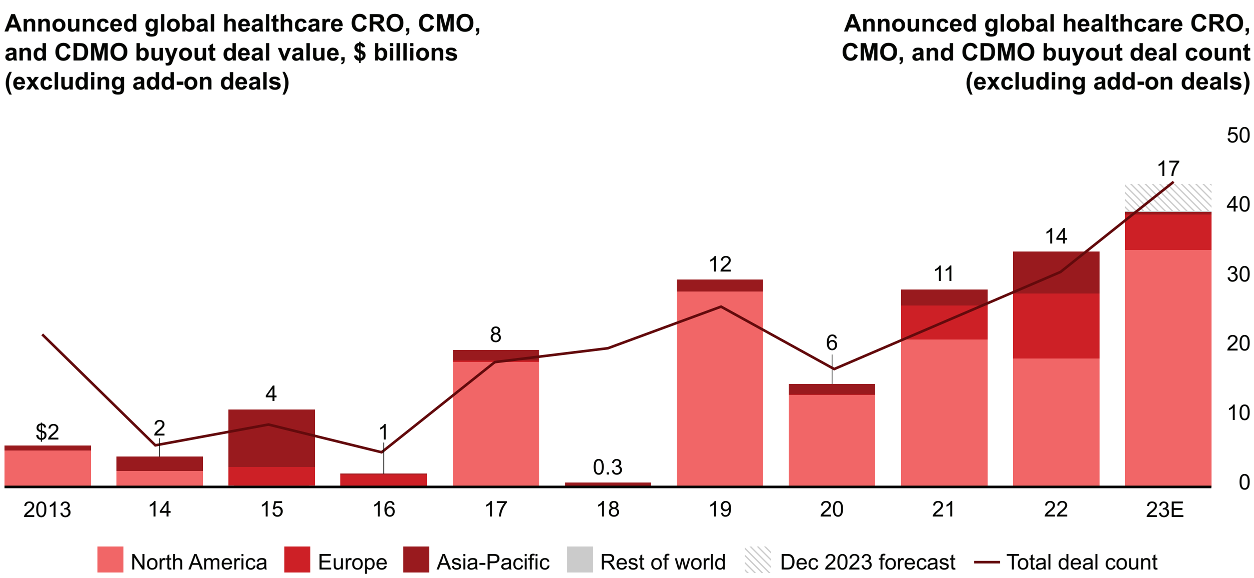
Next-generation modality therapeutics such as cell therapies, gene therapies, mRNA and other RNA therapies, and antibody drug conjugates are riding a long-term growth trend. Growth has stemmed from leaps in fundamental research as well as regulatory and commercial dynamics such as the Inflation Reduction Act. Each modality has unique discovery, development, and manufacturing processes that require discrete inputs and services to support the advancement of products.

Investment opportunities in this space are tricky to source and win given the requirement to find technical niches and invest ahead of the derisking of the modality. But for those prepared to compete here, the payoffs can be huge. This year, for example, ArchiMed and Warburg Pincus exited Polyplus in a sale to Sartorius Stedim Biotech for $2.6 billion.

The disruption brought about by innovation in advanced modalities has led big pharmaceutical companies and small independent biotechs alike to turn to outsourced service providers to complement in-house investments—witness Bayer's $250 million investment in a Parkinson's Disease cell therapy manufacturing facility. In turn, investors have sought to invest in contract research organizations (CROs), contract manufacturing organizations (CMOs), and CDMOs with deep ties to pharma sponsors (*see Figure 3*). Two of the year's three largest deals were contract organizations—the taking private of Syneos Health and the carve-out of Baxter BioPharma Solutions (now known as Simtra Biopharma Solutions). Investors had the strongest appetite for contract organizations with specialized capabilities and expertise, such as Simtra's strength in sterile fill/finish, and smaller preclinical-focused CROs in Europe.

> Next-generation modality therapeutics such as cell therapies, gene therapies, mRNA and other RNA therapies, and antibody drug conjugates are riding a long-term growth trend.

Figure 3: Outsourced services organizations have become more attractive



Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; includes only deals in the life sciences tools and biopharma sectors; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

PE interest in early-stage therapies and precommercial devices has grown

Historically, activity involving early-stage therapies and precommercial medical devices has been uncommon given the event-driven nature of these investments. But the evolving macro environment and deal market is making some investors increasingly comfortable with evaluating and underwriting such investments. For example, in November TPG led an $85 million series B investment into MBrace Therapeutics, a preclinical antibody-drug conjugate player, via the TPG Life Sciences Innovations Fund (TPG LSI) and The Rise Fund.

Competition with strategics for these assets raises the bar for technical and operations due diligence on the part of private equity. Additionally, it's essential to assess value creation opportunities during due diligence to determine whether private equity ownership offers greater growth potential than strategic ownership. To do this, private investors are building expertise in many ways including upskilling technical investment teams, acquiring smaller life sciences-focused funds (such as Carlyle's acquisition of Abingworth in 2022), raising life sciences-focused investment vehicles, and partnering more closely with professional services firms and operating experts.

Investors look past the sound and the fury

Looking ahead, life sciences innovation appears to be robust and well positioned to deliver pioneering products that solve long-standing health needs and generate economic and societal value. While the biotech sector ran into difficulties with fund-raising in 2023, investors appear to be looking past the short-term noise and are prepared to invest in promising life science innovations and in the services, products, and IT solutions to support those advances. As a result, this domain has the potential to create attractive returns for their limited partners while improving patient outcomes.

While the biotech sector ran into difficulties with fund-raising in 2023, investors appear to be looking past the short-term noise and are prepared to invest in promising life science innovations and in the services, products, and IT solutions to support those advances.

India's Healthcare Industry Comes of Age

Economic, regulatory, and demand factors converge to create a new investing hub in Asia-Pacific.

By Homer Paneri, Vikram Kapur, Nirad Jain, Kara Murphy, Dmitry Podpolny, Franz-Robert Klingan, and Alex Boulton

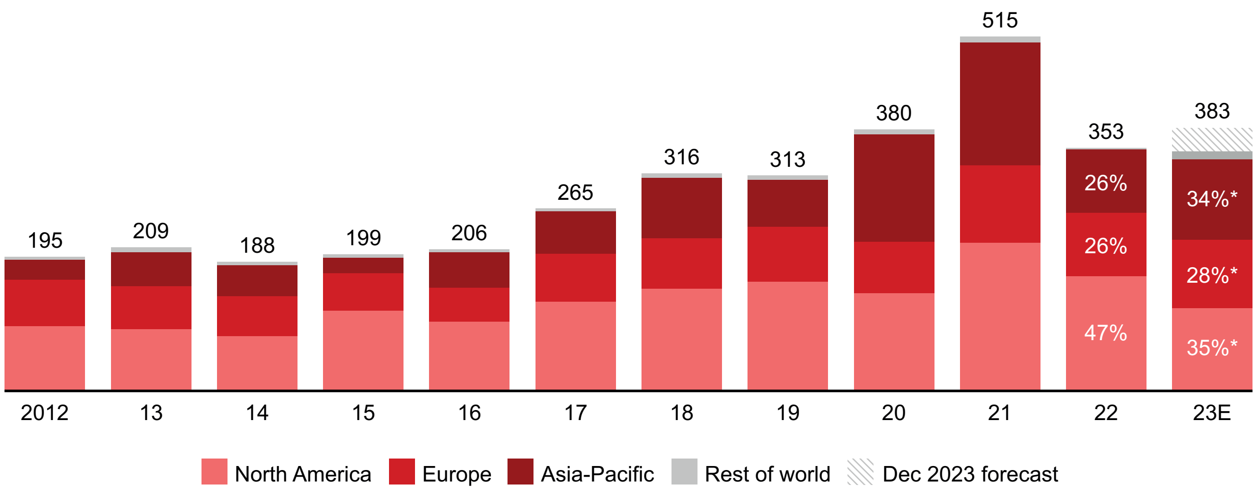
At a Glance

- Private equity deal volume in Asia-Pacific remained robust in 2023, bucking the slowdown seen in North America.
- Investors are looking to diversify their geographic presence within Asia-Pacific, which is now experiencing multiple engines of growth.
- India's economic growth, business-friendly government, pharmaceuticals manufacturing landscape, and thriving middle class are driving investment.
- Spending on private healthcare, growing pharma manufacturing and services, and an evolving healthcare technology ecosystem are turning India into a private equity hub.

Healthcare markets in the Asia-Pacific region are maturing—and in parallel, private equity (PE) deal volume is bucking the slowdown seen in North America (*see Figure 1*). Asia-Pacific's share of global healthcare PE deals continues to rise, growing from 26% of global deal activity in 2022 to a projected 34% in 2023.

Figure 1: Asia-Pacific bucked the deal slowdown found in North America in 2023

Global healthcare buyout deal volume (excluding add-on deals)



Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023; *percentages reflect the year-to-date share of volume by region
Sources: Dealogic; AVCJ; Bain analysis

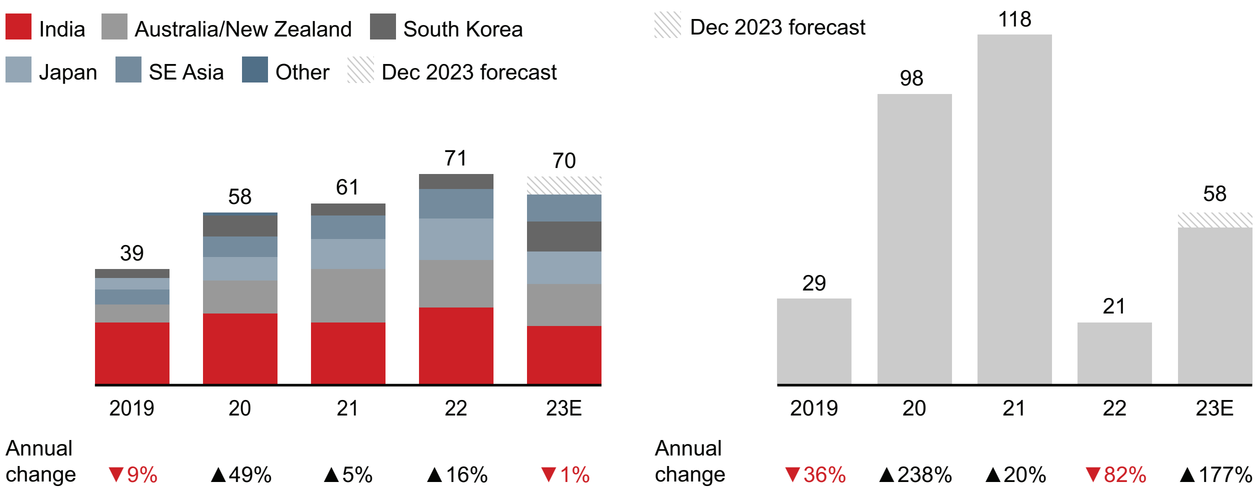
The Asia-Pacific region has seen intensified deal activity outside of China—historically the main engine of transactions in the area—and is being transformed into a region with multiple engines of growth. Buyouts increasingly occurred across the geography, from the high-income economies like Australia and South Korea to budding middle-income nations such as India. About two-thirds of the deals in India were executed by funds with less than $50 billion in assets under management (AUM), illustrating the wealth of activity outside of megacap funds.

In China, many investors have stayed on the sidelines as the country navigates an evolving healthcare policy, Covid's impact on public budgets, and a softening economy. Nonetheless, Chinese activity has begun to rebound, rising from 21 deals in 2022 for a total of $1.6 billion in value, to a projected 58 deals in 2023, reaching around $3.4 billion in value (see *Figure 2*). Overall, Asia-Pacific buyout activity declined, from $17.1 billion in 2022 to $14.2 billion in 2023, though it held up well compared with other regions.

Figure 2: China's rebound in deal volume during 2023 largely accounts for the overall rise in volume in Asia-Pacific

Asia-Pacific healthcare buyout deal volume excluding China (excluding add-on deals)

China healthcare buyout deal volume (excluding add-on deals)

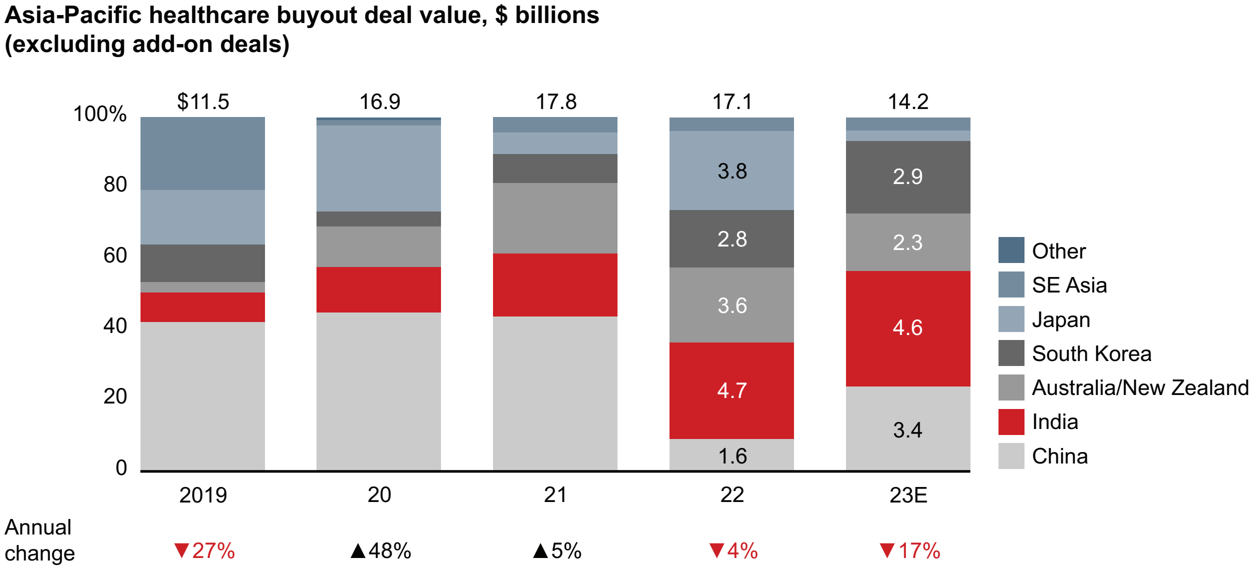


Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets; based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

Many biopharma and medtech companies have shifted toward a "China plus one" strategy: diversifying beyond China and creating opportunity for input and final product manufacturers in countries with deep talent pools, low labor costs, and business-friendly environments. Moreover, private spending on healthcare is on the rise across Asia-Pacific, as economic growth lifts millions of people into the middle class and health takes on new importance in the wake of the pandemic.

India stands out as the main force expanding Asia-Pacific's share of global deal activity, accounting for roughly 30% of the region's deal value from 2022 to 2023 (*see Figure 3*). Resilient economic growth, a business-friendly government, a maturing pharmaceutical manufacturing landscape, and a burgeoning middle class eager to pay for quality healthcare have resulted in many investment opportunities. In 2023, India is expected to host 22 healthcare deals, a slight decline from the 26 in 2022. Deal value is expected to come in at $4.6 billion in 2023, just below the $4.7 billion in 2022, with India remaining the leader in deal value across the region.

Figure 3: India leads the Asia-Pacific region in deal value



Notes: Excludes spin-offs, add-ons, loan-to-own transactions, special purpose acquisitions, and acquisitions of bankrupt assets. Based on announcement date; includes announced deals that are completed or pending, with data subject to change; deal value does not account for deals with undisclosed values; values updated based on Dealogic 2020 sponsor classifications; values include net debt where relevant; 2023E annualized assuming the average ratio of January–November to December from 2019 to 2022, based on data through November 30, 2023
Sources: Dealogic; AVCJ; Bain analysis

Importantly, exits for investors in India have been strong, validating the country's significant upside potential. Deal selection was still critical to generate returns during this period, as demonstrated by notable exits such as TPG's 2023 sale of a controlling stake in Care Hospitals to Blackstone. Global PE investors have grown more comfortable putting larger amounts of capital to work in India, making the market more competitive. Moreover, more transactions are becoming controlling deals, as the perceived risk of making large investments in India diminishes—including for owners, who are often founders of the healthcare asset, and who are becoming more comfortable handing over the reins to investors.

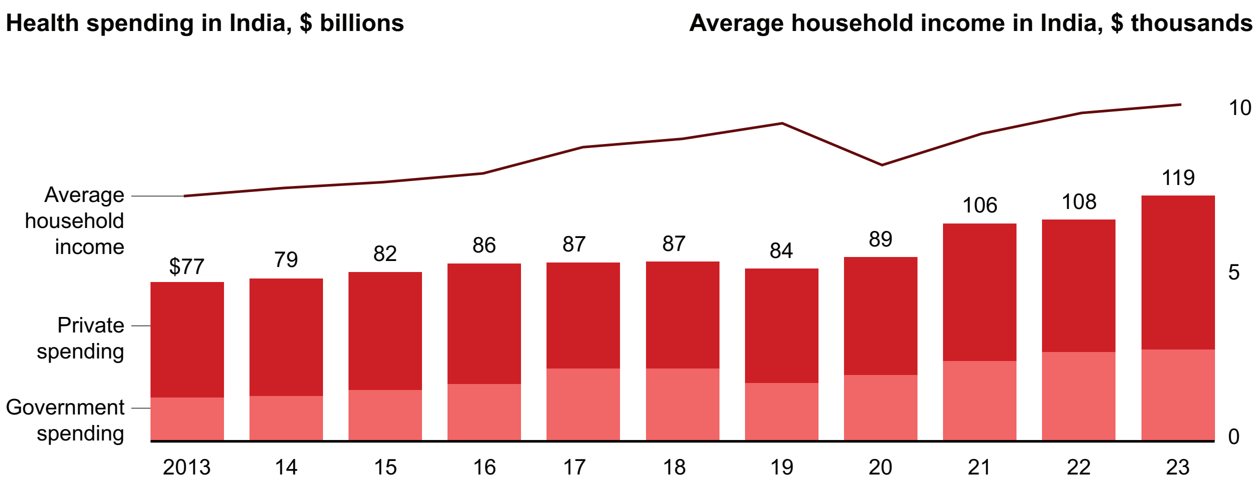
Three forces behind India's rise

India's rise as a new hub of healthcare PE deal activity stems from three factors: greater expenditure on private and public healthcare, booming pharma manufacturing and services, and an evolving healthcare technology ecosystem.

Spending on private and public healthcare: India's fast-growing middle class is spending more on healthcare. With disposable incomes rising and an explosion of insurance technology (insurtech) platforms and private payers (such as Digit and Acko), private healthcare has become more accessible. Moreover, Covid served to reset consumers' attitudes about their own spending on healthcare, as a large share of the population personally witnessed Covid-related tragedies, shoring up the importance of health in their minds. Meanwhile, government health expenditures have risen significantly over the past decade (from around 29% of total health expenditure in 2014–15 to approximately 39% in 2021–22—*S&P Global data*), and healthcare spending is expected to grow further (*see Figure 4*).

Demand for high-quality healthcare has been met with supply as more investors enter the market. Multi-specialty hospitals have seen a flurry of activity over the past decade, including deals in 2023, such as Temasek's acquisition of an additional 41% of Manipal Health Enterprises (bringing its ownership to 59%) for around $2 billion, and Blackstone's acquiring a controlling stake in Care Hospitals for some $800 million from TPG. More recently, single-speciality clinics have seen a surge in activity, most notably with BPEA EQT's acquisition of a controlling stake in Indira IVF, an in vitro fertilization clinic chain, valued at $1.1 billion.

Figure 4: Private and public spending on healthcare have been rising in India



Annual change										
Household income	▲4%	▲3%	▲4%	▲12%	▲3%	▲6%	▼16%	▲14%	▲8%	▲3%
Private spending	▲2%	▲0%	▲2%	▼12%	▲1%	▲7%	▲3%	▲17%	▼4%	▲16%
Government spending	▲4%	▲13%	▲11%	▲27%	▲0%	▼20%	▲13%	▲22%	▲11%	▲3%

Sources: S&P Household Income Projections; Fitch Solutions Health Expenditure

Booming pharma manufacturing and services: India's stature in small molecule manufacturing has risen. Supportive government policy (including the Production Linkage Incentive program), a vast pool of chemistry and engineering talent, a strengthening pharma ecosystem, and a push to diversify supply chains from China have propelled India's rise to a top-3 global manufacturer of pharmaceuticals by volume, and the top global generics manufacturer. Covid further boosted India to the top position in vaccine manufacturing, supplying 50% of global vaccine demand.

For PE investors, India's emergence as a leading pharma hub has created an opportunity in pharma services, especially manufacturing services, such as contract development and manufacturing organizations (CDMOs) and active pharmaceutical ingredient (API) producers. Global PE funds—including Advent International under its Cohance Lifesciences brand, Carlyle via drugmaker Viyash, and PAG via Sekhmet Pharmaventures—continued to grow their API/CDMO platforms started in 2021–22 with a number of add-ons.

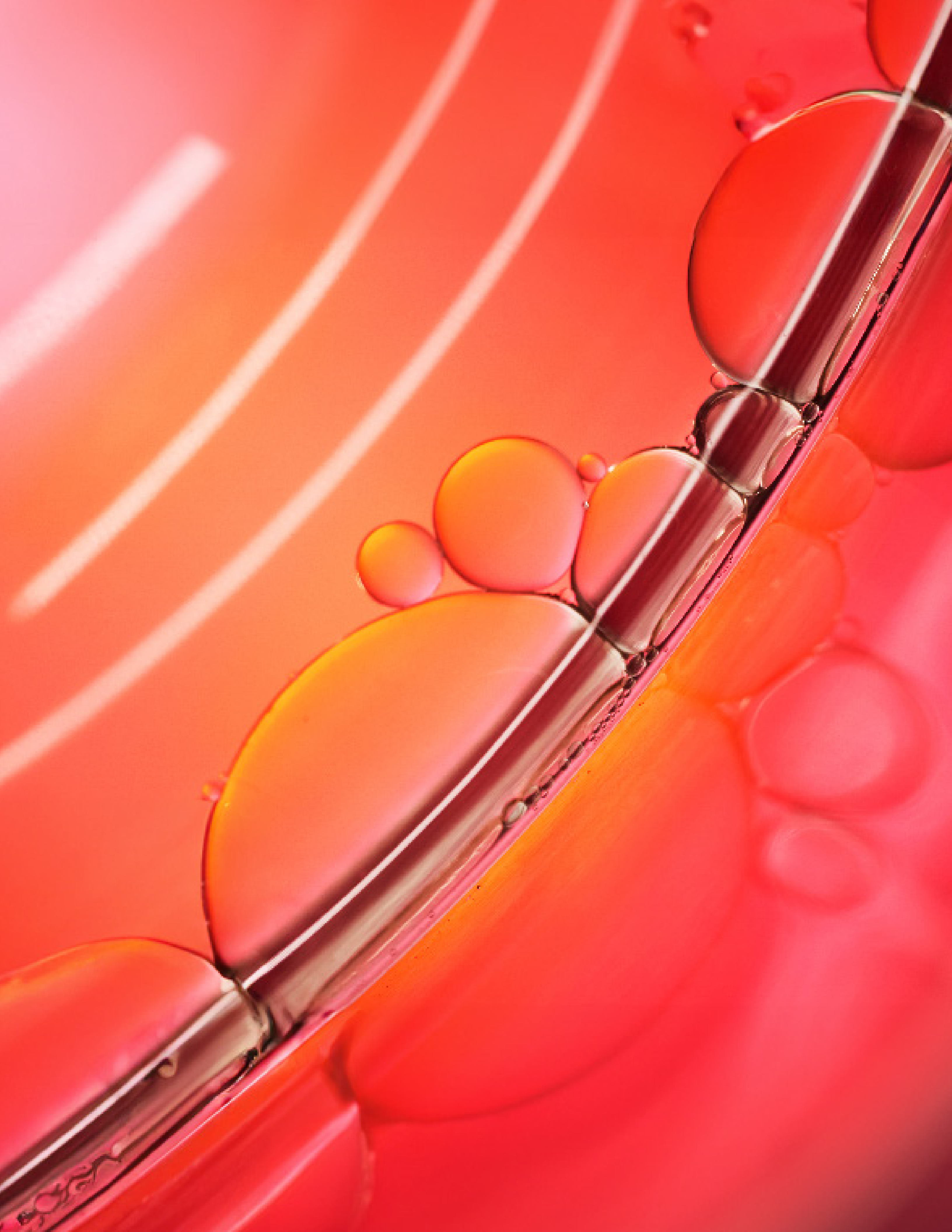
While small molecules have been the focus to date, there are early signs that large molecules, especially biologics, may be the next frontier as many such therapies start to go off patent, creating opportunity for generics. But China may have the leg up in generics, given its deeper talent pools in key areas of expertise such as microbiology.

Evolving healthcare technology ecosystem: India has historically served as the back end for many US- and Europe-focused healthcare data and analytics companies, such as revenue cycle outsourcers. However, in recent years, digital health companies serving the Indian market directly—especially in fitness and wellness, such as HealthifyMe, telemedicine, such as Mfine, and insurtech, including Turtlemint and Even—have seen brisk activity. While dealmaking in digital health has slowed, long-term fundamentals, notably a young population eager to engage digitally, remain strong for Indian companies operating at the intersection of healthcare and technology.

Investors vie over opportunities

India's share of global deal activity remains on an upward trajectory. Private providers (both multispecialty and single specialty) present significant long-term opportunity, given the fragmentation and underpenetration in healthcare currently. Investors that can scale up to deliver high-quality care that meets the surging demand in the Indian market have the potential to replicate the generous returns seen in recent years. Similarly, pharma manufacturing will continue to present opportunity for private equity, given the sector's fragmentation, supportive government policies, and potential in biologics and generics.

The past few years have proved that the risk-return profile of investing in healthcare in India is very favorable: For relatively small incremental risk above higher-income markets, the potential for strong return is significant.



Key contacts in Bain's Healthcare Private Equity team

Healthcare Private Equity team leaders

Nirad Jain in New York (*Nirad.Jain@bain.com*)
Kara Murphy in Boston (*Kara.Murphy@bain.com*)
Franz-Robert Klingan in Munich (*Franz-Robert.Klingan@bain.com*)
Dmitry Podpolny in London (*Dmitry.Podpolny@bain.com*)
Alex Boulton in Singapore (*Alex.Boulton@bain.com*)
Vikram Kapur in Singapore (*Vikram.Kapur@bain.com*)

Healthcare and Life Sciences practice leaders

Tim van Biesen in New York (*Tim.vanBiesen@Bain.com*)
Vikram Kapur in Singapore (*Vikram.Kapur@bain.com*)
Loïc Plantevin in Paris (*Loic.Plantevin@bain.com*)
Joshua Weisbrod in New York (*Joshua.Weisbrod@bain.com*)

Healthcare Private Equity team members

Ishaan Anand in San Francisco (*Ishaan.Anand@Bain.com*)
Maria Arnaoudona in New York (*Maria.Arnaoudona@bain.com*)
Roch Baranowski in Warsaw (*Roch.Baranowski@bain.com*)
Slavena Bardarova in London (*Slavena.Bardarova@bain.com*)
Jon Barfield in New York (*Jon.Barfield@bain.com*)
Alan Barnes in New York (*Alan.Barnes@Bain.com*)
Eric Berger in Boston (*Eric.Berger@bain.com*)
Patrick Biecheler in Paris (*Patrick.Biecheler@bain.com*)
Pierre-Antoine Bodin in Paris (*Pierre-Antoine.Bodin@bain.com*)
Michael Brookshire in Dallas (*Michael.Brookshire@bain.com*)
Kevin Chang in Hong Kong (*Kevin.Chang@bain.com*)
James Cleary in Boston (*James.Cleary@bain.com*)
Benjamin Cooke in San Francisco (*Benjamin.Cooke@bain.com*)
Cira Cuberes in Madrid (*Cira.Cuberes@bain.com*)
Evan Dadosky in Chicago (*Evan.Dadosky@Bain.com*)
Valerio Di Filippo in Rome (*Valerio.DiFilippo@bain.com*)
Justin Doshi in Atlanta (*Justin.Doshi@bain.com*)
Caitlin Dowling in New York (*Caitlin.Dowling@bain.com*)
Jason Evers in Chicago (*Jason.Evers@bain.com*)
Aaron Feinberg in New York (*Aaron.Feinberg@bain.com*)
Lorenzo Ferroni in Rome (*Lorenzo.Ferroni@bain.com*)

Sharon Fry in New York (*Sharon.Fry@bain.com*)
Parijat Ghosh in New Delhi (*Parijat.Ghosh@bain.com*)
Kai Grass in Düsseldorf (*Kai.Grass@bain.com*)
Justas Grigalauskas in London (*Justas.Grigalauskas@bain.com*)
Jeff Haxer in Chicago (*Jeff.Haxer@bain.com*)
Sarah Hershey in Boston (*Sarah.Hershey@bain.com*)
Junya Ishikawa in Tokyo (*Junya.Ishikawa@bain.com*)
Sarwar Islam in London (*Sarwar.Islam@bain.com*)
Todd Johnson in New York (*Todd.Johnson@bain.com*)
Kalyan Jonnalagadda in New York (*Kalyan.Jonnalagadda@bain.com*)
Laila Kassis in Boston (*Laila.Kassis@bain.com*)
Tom Kidd in Singapore (*Tom.Kidd@bain.com*)
Fabio La Mola in Singapore (*Fabio.LaMola@bain.com*)
Christian Langel in Zurich (*Christian.Langel@bain.com*)
Jeremy Martin in Atlanta (*Jeremy.Martin@bain.com*)
Lachlan McMurdo in Melbourne (*Lachlan.McMurdo@bain.com*)
Dieter Meyer in Zurich (*Dieter.Meyer@bain.com*)
Giovanni Battista Miani in London (*GiovanniBattista.Miani@bain.com*)
Alexander Mitscherlich in Munich (*Alexander.Mitscherlich@bain.com*)
Kenji Mitsui in Tokyo (*Kenji.Mitsui@Bain.com*)
Erin Ney in Boston (*Erin.Ney@bain.com*)
Dave Nierenberg in Boston (*Dave.Nierenberg@bain.com*)
Homer Paneri in Mumbai (*Homer.Paneri@bain.com*)
Christoffer Precht in Stockholm (*Christoffer.Precht@bain.com*)
Anshul Rana in Boston (*Anshul.Rana@Bain.com*)
Derek Riesenberg in Boston (*Derek.Riesenberg@bain.com*)
Arathi Sasidharan in Singapore (*Arathi.Sasidharan@bain.com*)
Christoph Schlegel in Frankfurt (*Christoph.Schlegel@bain.com*)
Ben Siegal in Boston (*Ben.Siegal@bain.com*)
Jason Slocum in Boston (*Jason.Slocum@bain.com*)
Quinn Solomon in San Francisco (*Quinn.Solomon@bain.com*)
Monika Sood in New Delhi (*Monika.Sood@Bain.com*)
Dale Stafford in Washington, DC (*Dale.Stafford@bain.com*)
Dhruv Sukhrani in Dubai (*Dhruv.Sukhrani@Bain.com*)
Matt Sullivan in San Francisco (*Matt.Sullivan@bain.com*)
Simon Sun in Shanghai (*Simon.Sun@bain.com*)
Mike Vandenberg in Denver (*Michael.Vandenberg@Bain.com*)
Daphné Vattier in Paris (*Daphne.Vattier@bain.com*)
Jim Verbeeten in Tokyo (*Jim.Verbeeten@Bain.com*)
James Viles in Sydney (*James.Viles@bain.com*)
Jon Webber in Atlanta (*Jon.Webber@bain.com*)

Eli Weinberg in New York (*Eli.Weinberg@bain.com*)
Jeff Woods in Boston (*Jeff.Woods@bain.com*)
Grace Wynn in Boston (*Grace.Wynn@bain.com*)
Sarah Yanes in New York (*Sarah.Yanes@bain.com*)
Sungwon Yoon in Seoul (*Sungwon.Yoon@bain.com*)

Bold ideas. Bold teams. Extraordinary results.

Bain & Company is a global consultancy that helps the world's most ambitious change makers define the future.

Across 65 cities in 40 countries, we work alongside our clients as one team with a shared ambition to achieve extraordinary results, outperform the competition, and redefine industries. We complement our tailored, integrated expertise with a vibrant ecosystem of digital innovators to deliver better, faster, and more enduring outcomes. Our 10-year commitment to invest more than $1 billion in pro bono services brings our talent, expertise, and insight to organizations tackling today's urgent challenges in education, racial equity, social justice, economic development, and the environment. Since our founding in 1973, we have measured our success by the success of our clients, and we proudly maintain the highest level of client advocacy in the industry.